

What Is Claimed Is:

1. A beverage cooling system, comprising:

a cold plate for receiving ice and including integral support means for mounting a carbonator in heat exchange relationship with said cold plate and in spaced relationship from the remainder of said cold plate, such that mounting of the carbonator by said support means does not result in a substantial reduction in a surface area of said cold plate that is available to receive ice.

2. A beverage cooling system as in claim 1, wherein said cold plate has a heat exchange surface and said support means is for mounting the carbonator in spaced relationship from said heat exchange surface so that the carbonator does not reduce a surface area of said heat exchange surface that is available to receive ice.

3. A beverage cooling system as in claim 1, wherein said cold plate support means has a carbonator mounting surface that is vertically above the remainder of said cold plate for mounting the carbonator vertically above said cold plate.

4. A beverage cooling system as in claim 1, wherein said cold plate support means comprises a pair of integral vertically extending supports having upper surfaces for mounting the carbonator on said upper surfaces and above the remainder of said cold plate.

5. A beverage cooling system as in claim 1, wherein said cold plate has a heat exchange surface and said cold plate support means comprises at least two integral supports extending vertically upward from a perimeter of said heat exchange surface for mounting the carbonator on upper ends thereof with the carbonator in vertically spaced relationship from and above said heat exchange surface.

6. A beverage cooling system as in claim 5, wherein said upper ends of said supports are saddles that are complementary in shape to the shape of a carbonator to be mounted to provide intimate heat transfer contact with the carbonator.

7. A beverage cooling system as in claim 1, wherein said cold plate is angled downward to facilitate runoff of ice melt water from said cold plate and said support means is for mounting the carbonator in horizontal orientation.

8. A beverage cooling system as in claim 4, wherein said cold plate is angled downward to facilitate runoff of ice melt water from said cold plate and said pair of vertically extending supports mount the carbonator horizontally on said upper surfaces thereof.

9. A beverage cooling system as in claim 4, wherein said cold plate has a generally rectangular heat exchange surface having a perimeter and said pair of integral vertically extending supports are located along one side of said perimeter in horizontal spaced relationship.

10. A beverage cooling system as in claim 4, wherein said cold plate has a generally rectangular heat exchange surface having a perimeter and said pair of integral vertically extending supports are located on respective opposite sides of said perimeter.

11. A beverage cooling system, comprising:

a cold plate having a heat exchange surface for receiving ice, said heat exchange surface being defined within a perimeter of said cold plate and said cold plate further having integral support means extending upward from said perimeter and having upper surface means for mounting a carbonator tank in vertically spaced relationship from said cold plate heat exchange surface and in heat exchange contact with said

upper surface means, whereby mounting the carbonator tank on said cold plate does not result in a substantial diminution of a surface area of said cold plate heat exchange surface that is available to receive and retain ice.

12. A beverage cooling system as in claim 11, wherein said support means comprises a pair of horizontally spaced integral supports extending vertically upward from said cold plate perimeter for mounting the carbonator tank on said upper surface means thereof, so that the carbonator tank extends between said integral supports in vertically spaced relationship from said cold plate heat exchange surface.

13. A beverage cooling system as in claim 12, wherein said cold plate heat exchange surface is generally rectangular and said horizontally spaced integral supports extend vertically upward from one side of said cold plate perimeter for mounting the carbonator tank on said upper surface means thereof in vertically spaced relationship from said one side of said perimeter.

14. A beverage cooling system as in claim 12, , wherein said cold plate heat exchange surface is generally rectangular and said horizontally spaced integral supports extend vertically upward from opposite sides of said cold plate perimeter for mounting the carbonator tank on said upper surface means thereof in vertically spaced relationship from and above and across said heat exchange surface.

15. A beverage cooling system as in claim 12, wherein said upper surfaces of said integral supports are saddles for mounting a tubular carbonator tank and are configured to be complimentary in shape to supported surface areas of the

carbonator tank for intimate heat exchange contact between said saddles and the carbonator surface areas.

16. A beverage cooling system as in claim 12, wherein said cold plate is angled downward to facilitate runoff of ice melt water from said heat exchange surface, and said horizontally spaced integral supports extend vertically above said cold plate perimeter by amounts selected so that said upper surface means of said supports mount the carbonator tank in generally horizontal orientation.

17. A beverage cooling system, comprising: ✓
a cold plate for receiving ice on surfaces thereof, said cold plate including integral support means having support surface means; and
a carbonator mounted in heat exchange relationship with and on said cold plate support surface means, said support surface means mounting said carbonator in spaced relationship from the remainder of said cold plate surfaces, so that mounting said carbonator on said cold plate does not result in a substantial diminution of areas of said cold plate surfaces that are available to receive ice.

18. A beverage cooling system as in claim 17, wherein said cold plate has a heat exchange surface and said support surface means mounts said carbonator in spaced relationship from said heat exchange surface, so that mounting of said carbonator on said cold plate does not diminish an area of said heat exchange surface that is available to receive ice.

19. A beverage cooling system as in claim 17, wherein said cold plate support surface means is vertically above the remainder of said cold plate for mounting said carbonator vertically above said cold plate.

20. A beverage cooling system as in claim 17, wherein said cold plate support means comprises a pair of integral horizontally spaced and vertically extending supports having upper support surfaces for supporting said carbonator on said support surfaces and above the remainder of said cold plate.

21. A beverage cooling system as in claim 17, wherein said cold plate has a heat exchange surface and said cold plate support means comprises at least two horizontally spaced integral supports extending vertically upward from a perimeter of said heat exchange surface and having upper support surfaces for mounting said carbonator vertically spaced above said heat exchange surface.

22. A beverage cooling system as in claim 21, wherein said heat exchange surface is generally rectangular and said at least two supports extend vertically upward from one side of said perimeter of said heat exchange surface.

23. A beverage cooling system as in claim 21, wherein said primary heat exchange surface is generally rectangular and said at least two supports comprise two supports that extend vertically upward from opposite sides of said perimeter of said heat exchange surface.

24. A beverage cooling system as in claim 20, wherein said upper surfaces of said supports are saddles that are complementary in shape to a shape of said carbonator to provide intimate heat transfer contact between said support surfaces and said carbonator.

25. A beverage cooling system as in claim 17, wherein said cold plate is angled downward to facilitate runoff of ice melt water from said cold plate and said support means mounts said carbonator in horizontal orientation.

26. A beverage cooling system as in claim 20, wherein said cold plate is angled downward to facilitate runoff of ice melt water from said cold plate and said pair of vertically extending supports mount said carbonator horizontally on said upper support surfaces thereof.